



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/740,465

12/22/2003

Jung Sang Baek

0465-1062P

3623

2292 7590 04/09/2008
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

MOON, SEOKYUN

ART UNIT

PAPER NUMBER

2629

NOTIFICATION DATE

DELIVERY MODE

04/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/740,465	Applicant(s) BAEK ET AL.	
	Examiner SEOKYUN MOON	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☒ Claim(s) 10-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 04 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/31/07&1/9/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remark

1. Claims 13-15 and 19-21 presented previously were indicated as being allowable in the Final Office action mailed on November 30, 2007.

The Applicant has canceled claims 19-21 and added the allowable subject matter of previously-objected claim 14 to the independent claim 10 to make claim 10 patentably define over the applied arts.

However, in this correspondence, the amended claim 10 (which contains the allowable subject matter of previously-objected claim 14) and previously-objected claims 13 and 15 are rejected in view of new ground of rejection.

Accordingly, this Office action is made Non-Final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 10-13 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (here in after “AAPA”) in view of Park (US 6,362,804).

As to **claim 10**, AAPA teaches a method for displaying a video signal having a horizontal back porch in a display device [par. (0011) lines 1-2 and par. (0012) lines 1-3], comprising:

generating a source start pulse signal (“SSP” under “<Normal Operation Method>”) [fig. 2];

latching pixel data for a display (“abnormal display” under “<Normal Operation Method>”); and

skipping latch of subsequent pixel data (as “*HSY*” signal goes to a low level, data latching operation of the timing controller is paused) [fig. 2] during a transition period (a portion of “*Hori Sync* $4.7\mu s \pm 0.1$ ”) [fig. 2] of the video signal by using a clock enable signal (“*HSY*”) disabled at the transition period of the video signal;

AAPA does not teach latching pixel data for a black display from a start of the source start pulse signal to an end of the horizontal back porch.

However, Park teaches a method for displaying a video signal in a display device [abstract lines 1-3], comprising latching pixel data for a black display (“*BD*”) from a start of a source start pulse signal (“*SPI*”) to a start of a non-black image signal [fig. 9].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the display device of AAPA to latch pixel data for a black display from a start of the source start pulse signal to the start of the non-black image signal which is equivalent to the end of the horizontal back porch, as taught by Park, in order to display the image having an aspect ratio which is different from the aspect ratio of the display device in a proper position on the display device.

AAPA as modified by Park does not expressly teach the latch of 42 to 45 pixels of data being skipped, in the skipping step. In other words, AAPA as modified by Park does not expressly specify the number of pixels being skipped for data latching.

However, as the Examiner acknowledges that specifying the number of pixels being skipped for data latching to be 42 **or** 45 is not a required design instruction of the instant invention, but is merely an optional design specification of the display driving method of the instant invention, (which **varies depending on the type** of the inputted **video signal** [Specification: paragraph (0033)]), it would be an obvious matter of design choice.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to specify the number of pixels being skipped for data latching as being any natural number,

Art Unit: 2629

depending on the type of the inputted video signal since different inputted video signals would inherently require different pixel number of skipping for data latching.

As to **claim 11**, AAPA teaches the method of claim 10, comprising latching subsequent pixel data during a high-level of the video signal ("*Video Signal*") and skipping latch of subsequent pixel data (as "*HSY*" signal goes to a low level, data latching operation of the timing controller is paused) [fig. 2] during a second transition period (a portion of "*Hori Sync 4.7 μ s \pm 0.1*" included in the next period) [fig. 2] of the video signal by using a clock enable signal ("*HSY*") disabled at the second transition period of the video signal.

As to **claim 12**, AAPA [fig. 2] teaches the source start pulse signal ("*SSP*" under "<*Normal Operation Method*>") being outputted after a predetermined time period from a horizontal start pulse ("*HSP*").

As to **claim 13**, AAPA as modified by Park does not expressly teach the predetermined time period being **1.048 μ s**.

However, as the Examiner acknowledges that specifying the predetermined period as 1.048 μ s is determined based on the specific type of the inputted video signal, the NTSC signal, and thus the value is limited to the specific type of the inputted video signal, it would be an obvious matter of design choice to specify the predetermined period as 1.048 μ s.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to specify the length of the predetermined period as any positive real number within the horizontal block period, since different types of the inputted video signal would result in to have different length of the predetermined period.

As to **claim 15**, AAPA as modified by Park does not expressly teach the start of the source start pulse signal to the end of the horizontal back porch being about **3.14 μ s**.

However, as the Examiner acknowledges that specifying the length of the period between the start of the source start pulse signal to the end of the horizontal back porch as $3.14\ \mu\text{s}$ is determined based on the specific type of the inputted video signal, and thus the value is limited to the specific type of the inputted video signal, it would be an obvious matter of design choice to specify the interval as $3.14\ \mu\text{s}$.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to specify the length of the interval between the start of the source start pulse signal to the end of the horizontal back porch as $3.14\ \mu\text{s}$, since different types of the inputted video signal would result in to have different length of the interval between the start of the source start pulse signal to the end of the horizontal back porch.

Allowable Subject Matter

4. **Claims 1-9** are allowed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEOKYUN MOON whose telephone number is (571)272-5552. The examiner can normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 29, 2008

/S. M./

Examiner, Art Unit 2629

/Sumati Lefkowitz/

Supervisory Patent Examiner, Art Unit 2629